ABSTRACT

The present invention comprises systems and methods for handling large amounts of data prone to ambiguity and artifact in real-time in order to ensure patient safety while performing a procedure involving a sedation and analgesia system. The invention utilizes neural networks to weight data which may be more accurate or more indicative of true patient condition such that the patient condition reported to the controller and the user of a sedation and analgesia system will have increased accuracy and the incidence of false positive alarms will be reduced.